

Listing of the claims:

Claim 1 (Currently amended) A method for producing a cytokine in a corn plant, ~~host system~~ wherein said corn plant host system ~~has been~~ is transformed with a nucleic acid sequence encoding said cytokine, comprising the steps of:

cultivating said transformed corn plant host system under the appropriate conditions to result in the expression of said cytokine in a seed of said corn plant host system

wherein said cytokine accumulates to a level greater than 1% of the total soluble protein in ~~a sample of said corn seed plant host system~~.

Claim 2 (Currently amended) The method of claim 1, further comprising the step of purifying said expressed cytokine from said corn seed plant host system.

Claim 3 (Previously presented) The method of claim 1, wherein said expressed cytokine is free from amino acid modifications.

Claim 4 (Currently amended) The method of claim 1-3, wherein said ~~amino acid modification comprises the~~ cytokine is free from the addition of hydroxyproline ~~to said eytokine~~.

Claim 5 (Previously presented) The method of claim 1, wherein said cytokine is free of novel glycosylation.

Claim 6 (Currently amended) The method of claim 1, wherein said ~~chimeric~~ nucleic acid sequence encoding said cytokine further comprises the following components in a 5' to 3' direction of transcription:

_____ a.) a first nucleic acid sequence capable of regulating ~~the~~ transcription in said corn plant host system ~~of~~ operably linked to;

_____ b.) a second nucleic acid sequence wherein said second nucleic acid sequence encodes a signal sequence, wherein said second nucleic acid sequence is linked in reading frame with to a third;

_____ c.) said nucleic acid sequence encoding a said cytokine.

Claim 7 (Currently amended) The method of claim 6, wherein said nucleic acid sequence encoding said cytokine further comprises a ~~fourth~~ nucleic acid sequence ~~linked~~ in reading frame with to the 3' end of said third nucleic acid sequence encoding said cytokine.

Claim 8 (Currently amended) The method of claim 7, wherein said ~~fourth~~ nucleic acid sequence in reading frame with the 3' end of said nucleic acid sequence encoding said cytokine encodes a "KDEL" amino acid sequence.

Claim 9 (Currently amended) The method of claim 6, wherein said first nucleic acid sequence capable of regulating transcription comprises a plant active promoter.

Claim 10 (Currently amended) The method of claim 6, wherein said second nucleic acid sequence encoding said signal sequence is capable of targeting said cytokine to a sub-cellular location within a corn plant host system.

Claims 11-12 (Cancelled)

Claim 13 (Currently amended) The method of claim 10, wherein said sub-cellular location within a corn plant includes the endoplasmic reticulum.

Claim 14-19 (Cancelled)

Claim 20 (Currently amended) The method of claim 1, wherein said cytokine is a member of the cytokine superfamily selected from the group consisting of TGF-beta, PDGF, EGF, VEGF₂, chemokines₂, and FGFs.

Claim 21 (Cancelled)

Claim 22 (Previously presented) The method of claim 20, wherein said cytokine comprises G-CSF.

Claims 23-90 (Cancelled)

Claim 91 (Currently amended) A method for producing a cytokine in a corn plant, ~~host system~~ wherein said corn plant ~~host-system~~ has been transformed with a nucleic acid sequence encoding a cytokine, comprising the step of:

cultivating said transformed corn plant ~~host-system~~ under the appropriate conditions to result in the expression of said cytokine, wherein said expressed cytokine is free from amino acid modification.

Claim 92 (Currently amended) A method for producing a cytokine in a corn plant ~~host system~~ wherein said corn plant ~~host-system~~ has been transformed with a nucleic acid sequence encoding a said cytokine, comprising the step of:

cultivating said transformed corn plant ~~host-system~~ under the appropriate conditions to result in expression of said cytokine, wherein said expressed cytokine is free from novel glycosylation.

Claim 93 (Currently amended) The method according to ~~C~~claim 92, wherein said expressed cytokine ~~free from novel glycosylation~~ is free from O-linked glycosylation.

Claim 94 (Cancelled)

Amendments to the Specification:

Please **replace** the paragraph entitled: CROSS REFERENCE TO RELATED APPLICATIONS:

The present invention is related to and claims the benefit, under 35 U.S.C. §120, as continuation-in-part applications of patent applications Serial Nos. 09/113,244, filed 10 July 1998, and 09/316,847, filed 21~~0~~ May 1999, and is related to and claims the benefit, under 35 U.S.C. §119(e), of provisional patent application Serial No. 60/194,217, filed 3 April, 2000, the disclosures of which applications are expressly incorporated fully herein by reference.

Remarks

Applicants thank the Examiner for the interview granted on June 11, 2003. Applicants further thank Examiner Jeffrey Fredman and Gary Benzion for their helpful comments and suggestions provided during the interview. In order to facilitate prosecution, Applicants have adopted many of their kind suggestions.

The Examiner's attention is drawn to all of the arguments and evidence raised in Applicants response submitted on April 11, 2003 to the Final Office Action, mailed January 13, 2003 (Paper No. 12). The Examiner's attention is particularly drawn to page 7 and page 8 of Applicants response as submitted on April 11, 2003. Applicants have not reiterated certain of the arguments set forth in this response as it is submitted herewith for the Examiner's consideration.

Claim 94 has been canceled without prejudice. Upon entry of the foregoing amendment, claims 1-10, 13, 20, 22, and 91-93 are pending in the application, with claims 1, 91, and 92 being the independent claims. Claims 1, 2, 6, 10, 91, 92 and 93 have been amended. Support for the foregoing claim amendments may be found throughout the specification, and in the original claims. Specifically, support can be found, for example, at page 22 lines 24 through 32; Example 8 at page 51, line 17 through page 53, line 31; Example 7 at page 46, line 30 through page 51, line 16; Figure 14; Figure 24; and Figure 25 of the specification as filed.

By way of the present amendment, the specification has been amended to indicate the relationship of the present application to the priority documents and correct the filing date of U.S. Application No. 09/316,847. Applicants appreciate that the Corrected Filing Receipt mailed by the U.S. Patent and Trademark Office on October 23, 2001 for the above-referenced application correctly indicates the benefit claims. Support for the amendment to the specification can be found in the Declaration and Power of Attorney, filed on April 3, 2001, and in the Substitute Combined Declaration and Power of Attorney for Patent Application submitted herewith. No new matter enters by way of the present amendment.

I. Rejection Under 35 U.S.C. § 102

Claims 1-7, 9, 10, 13, 20, and 91-93 were rejected under 35 U.S.C. §102 (e) as being anticipated by Lee *et al.* (U.S. Patent Number 6,020,169) (hereafter "Lee"). Final Office Action mailed January 13, 2003 ("Final Action") at page 2. This rejection is respectfully traversed.

As stated previously in Applicants' response to the Final Office Action (filed April 11, 2003), in order to support an anticipation rejection under 35 U.S.C. §102, the Office must demonstrate that each and every element of a claimed invention is disclosed within a single prior art reference. *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Applicants submit that the Examiner has not demonstrated that Lee teaches each and every element of the claimed invention, and therefore the anticipation rejection is improper.

Lee does not show IL-4 expression at a level greater than 1% of total protein expression

The Examiner alleges that Lee shows cytokine accumulation to a level greater than 1% of the total soluble protein in a sample of said plant host system. Final Action at

page 3. The Examiner bases this conclusion on figure 11 of the Lee reference, specifically as represented by clone 81 in figure 11. *Id.* The Examiner states that “clone 81 produced over 1000 nanograms of interleukin-4 (IL-4) per gram of calli, which inherently represents more than 1% of the total soluble protein.” *Id.*

Claim 1 and its dependents are directed to a method of expressing a cytokine where the cytokine accumulates to a level greater than 1% of the total soluble protein in a corn seed. Lee does not state the amount of IL-4 expressed as a percentage of soluble protein. Therefore, according to the MPEP § 2112, the Examiner must provide rationale or evidence tending to show inherency. Applicants respectfully submit that no rationale or evidence has been provided for the Examiner’s suggestion that 1000 nanograms of IL-4 per gram of Calli inherently represents more than 1% of the total soluble protein.¹

To establish inherency, “the Office must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). For an unstated, claimed element to be found inherent in an anticipating reference, the unstated element must exist as a matter of scientific fact and flow naturally from the elements expressly disclosed in the prior art reference. *Hughes Aircraft Co. v. U.S.*, 8 USPQ2d 1580, 1583 (Ct. Cl. 1988). Compare *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999); *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999); *Abbott Laboratories v. Geneva Pharmaceuticals, Inc.*, 182 F.3d 1315 (Fed. Cir. 1999). Here, the Examiner has not provided any such technical reasoning or scientific fact, and thus has not met the burden of proof to reject the presently claimed subject matter under 35 U.S.C. §102.

Although the Examiner has not provided a sound basis for concluding that Lee inherently anticipates the presently claimed subject matter, Applicants previous response,

¹ The Examiner alleges that Lee shows “1% of total protein is the newly expressed cytokine” but fails to explain how it has arrived at this value. Final Action at page 6.

filed April 11, 2003, and the remarks below demonstrate that the skilled artisan would not find that clone 81 of figure 11 in Lee accumulates IL-4 at a level near 1% of total soluble protein.

To calculate the percentage of IL-4 expressed per calli in clone 81 of figure 11, a basic conversion of units is performed because to calculate a percentage, the units must be the same, i.e. grams over grams. To determine the amount of IL-4 in clone 81 of figure 11 in grams, 1000 nanograms is multiplied by a conversion factor.²

To convert nanograms (ng) to grams (g):

$$1000 \text{ ng of IL-4} \times \frac{1 \text{ g}}{1,000,000,000 \text{ ng}} = 0.000001 \text{ g of IL-4}$$

To calculate the percent of IL-4 per calli: 0.000001 gram of IL-4 is what percent of 1 gram of calli:

$$\frac{0.000001 \text{ g of IL-4}}{1 \text{ g of calli}^3} = 0.000001 \times 100 = 0.0001\%$$

Thus, figure 11 of Lee asserts that IL-4 is expressed at an amount equal to 0.0001% of the total cell weight. Applicants understand the Examiner's argument of inherency to suggest that 0.0001% of the total cell weight is inherently greater than 1% of the total soluble protein because the proteins inside the cell (soluble or insoluble) are only a fraction of the total weight of the cell. While Applicants agree that the protein weight is only a fraction of the cell weight, the cell would have to be more than 10,000 times heavier than the weight of all the soluble proteins inside for 1000 ng of IL-4 per gram of

² The conversion factor changes the units of measurement without affecting the value of the amount of IL-4 measured from clone 81 in figure 11 of Lee. Because 100,000,000 nanograms are equal to 1 gram, the conversion factor is 1 gram divided by 100,000,000 nanograms.

³ The denominator is 1 gram of calli because there were 1000 ng of IL-4 (alternatively stated as 0.000001 g of IL-4) per (1) gram of calli. The amount of IL-4 per gram, 0.000001, is multiplied by 100 to get a percentage.

calli to inherently represent more than 1% of total soluble protein. Alternatively stated, to support an anticipation rejection under Lee, the Examiner must show a basis in fact and/or technical reasoning to reasonably support the determination that only 0.00001% of the cell's weight could be attributable to protein.

Applicants did not find any basis to suggest that the cell is 10,000 times heavier than the weight of all the soluble proteins inside. As such, Applicants respectfully request that the Examiner either withdraw the rejection or provide a reference available to one skilled in the art at the time of filing to support a conclusion that 1000 ng of IL-4 per gram of calli inherently represents more than 1% of total soluble protein.⁴ Moreover, none of the calculations in Applicants previous response, filed April 11, 2003, and in the following remarks suggest that Lee discloses IL-4 expression at a level near 1% of the total soluble protein.

As stated previously, using the reference Alberts *et al.*, Molecular Biology of the Cell, page 88 (2d. ed. 1989; submitted herewith), the skilled artisan might generously approximate that 20% of cell weight is attributable to protein.⁵ Using this estimate, the cell might be five times heavier than the weight of the protein. The Examiner was not persuaded by these calculations because the estimate is not evidence with regard to calli of plants. Advisory Action, mailed May 20, 2003, at Continuation Sheet. However, without extrinsic evidence to support the Examiner's argument of inherency, Applicants used available resources to approximate the percentage of cell weight that is attributable to plants. Applicants respectfully reiterate that it is the Examiner's burden to provide rationale or evidence to show inherency. MPEP § 2112.

⁴ Applicants have timely traversed and argued the Examiner's inherency argument. Applicants have respectfully requested that the Examiner set forth evidence in support of the rejection. If the Examiner is relying on facts within his personal knowledge, Applicants request the Examiner to set forth those facts pursuant to 37 C.F.R. § 1.104(d)(2).

⁵ In Applicants' previous response to the Final Office Action, submitted April 11, 2003, the percentage of IL-4 produced by clone 81 in Lee was calculated using the generous conversion factor of 20%.

Another estimate, based on data from Gao and Lee, *Biotechnol. Progress* 8(4):285-90 (1992) (Gao; submitted herewith) and from the inventors of the instant application for tobacco cells, is that 0.07% of the fresh weight of tobacco cells grown in suspension is soluble protein.⁶ This estimate suggests that the cell might be almost 1,500 times heavier than its proteins. Still, the conversion factor for tobacco cells supported by data from Lee and from the inventors of the instant application is almost a factor of ten less than what would be required for figure 11 of Lee to inherently represent cytokine expression at a level greater than 1% of total soluble protein.

Below, Applicants provide another calculation to illustrate that, clone 81 of Figure 11 from Lee, does not express IL-4 at a level nearly equal to 1% of total soluble protein. Applicants use the estimate from above, that 0.07% of the fresh weight of tobacco cells grown in suspension is soluble protein, to calculate:

$$\frac{1 \text{ g calli cells}}{0.0007 \text{ g total protein}} \times \frac{1000 \text{ ng IL-4}}{1 \text{ g calli}} \times \frac{1 \times 10^{-9} \text{ g}}{1 \text{ ng}} = \frac{0.000001 \text{ g IL-4}}{0.0007 \text{ g total protein}}$$

$$\frac{0.000001 \text{ g IL-4}}{0.0007 \text{ g total protein}} \times 100 = 0.14\% \text{ cytokine per total protein}$$

As such, Applicants maintain that Lee does not illustrate expression of a cytokine to a level remotely close to 1% of total soluble protein.⁷

The Examiner argues that the Gao reference is inapposite since it involves a different protein under different conditions and uses different methods than those shown in Lee for IL-4. Advisory Action, mailed May 20, 2003, at Continuation Sheet. Applicants note that the presently claimed subject matter also involves a different protein under different conditions and

⁶ Both Lee *et al.* and the inventors of the instant application use tobacco NT-1 cells, selected with kanamycin, and grown in an MS-based media.

⁷ Applicants note that an estimate of the protein content of a tobacco cell, based on the data provided by Gao and Lee, in *Biotechnol. Progress* 8(4):285-90 (1992), was submitted in Applicants Response to Final Office Action filed on April 11, 2003.

uses different methods than that of Lee. As such, Applicants respectfully suggest that Lee is similarly unsuited to support an anticipation rejection of the presently claimed subject matter.

On the basis of the foregoing, Applicants submit that the Office has failed to meet its *prima facie* burden of proof because it has not shown that Lee teaches the claimed subject matter. Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §102.

Lee does not expressly teach expression of a cytokine to a level greater than 1% of total protein expression

The Examiner alleges that “Lee also expressly teaches that expression of over 1% of total protein is achievable” as supported by column 1, lines 37-60 of Lee. Final Action at page 3. Whatever else Lee does disclose, the reference does not disclose the presently claimed invention.

In Lee, the Background of the Invention section includes a brief history of the study of antibody expression in tobacco plants. Lee states that the co-expression of both the heavy and light immunoglobulin chains in a transgenic tobacco plant led to a large accumulation of antibody within the leaf tissue, 1.3% of the total leaf protein. *See* Lee at column 1, lines 40-47. Lee concludes that antibody accumulation is apparently dependent upon the stabilizing effect of the heavy/light chain dimer formation. *Id.* at column 1, lines 51-56.

The Examiner cites column 1, line 45 as support for the allegation that Lee expressly teaches that “proteins can accumulate to 1.3% of leaf protein.” Advisory Action mailed May 20, 2003 at Continuation Sheet. Applicants argue that, when taken in context, Lee is referring to the accumulation of full antibody proteins within leaf tissue at

a level of 1.3% of the total leaf protein.⁸ Applicants further argue that the full antibodies referred to in Lee are different from the cytokines recited in the presently pending claims. Full antibodies require two different genes, and the gene products assemble in a ratio of 2:2. Cytokines differ from antibodies in that they are a class of single chain proteins and the product of a single gene. Structural similarity has been reported between cytokine molecules.⁹

The Examiner, citing MPEP §716.01(c), claims that the arguments presented by Applicants are not sufficient to show inoperability of the prior art. However, Applicants are not presently suggesting that Lee is inoperable. Instead, Applicants have demonstrated that Lee does not anticipate the presently pending claims because significant limitations of the present claims are not disclosed or suggested by the reference. If, as the Examiner alleges, Lee contains an express teaching that that expression of over 1% of total protein is achievable, Lee only expressly teaches expression of over 1% of total protein for full antibodies in tobacco plant leaves.¹⁰ The calculations above demonstrate that whatever else Lee may teach or suggest, it does not teach cytokine expression at a level greater than 1% of total soluble protein.

Thus, Applicants respectfully submit that the Lee reference does not disclose each and every limitation of the claimed invention and can not support a rejection under 35 U.S.C. §102.

⁸ The sentence containing column 1, line 45 is: "The coexpression of both chains led to a large accumulation of antibody within the leaf tissue, an increase from 0.3% to 1.3% of the total leaf protein." Lee at column 1, lines 43-46.

⁹ See Hill *et al.*, The structure of granulocyte-colony-stimulating factor and its relationship to other growth factors. *Proc. Natl. Acad. Sci. USA*, 90:5167-5171 (1993).

¹⁰ Applicants disagree with the Examiner on this point.

Lee does not show cytokine expression in corn plants

As discussed above, Applicants respectfully submit that whatever else Lee does disclose, Lee does not disclose the claimed invention. Nonetheless, in order to further prosecution, all of the claims have been amended without prejudice to recite the production of a cytokine in a corn plant.

None of the references cited in the above-captioned application report high levels of cytokine expression in a corn plant. The instant specification provides the expression levels of full antibodies and cytokines from a variety of species and tissue types. *See* Table 1 at page 6 of the instant specification. Cytokine expression in corn seed at about a level of 1% total soluble protein was an unexpected result, particularly because similar experiments in soy seed, performed at approximately the same time, did not produce the same high levels of cytokine expression as observed in corn seed (*see* the Table below).

System	hGH = 1 chain cytokine
Tobacco seeds % tsp¹¹	0.16 or less ¹²
Soy seed % tsp	0.0008 ¹³
Corn seed % tsp	6 ¹⁴

¹¹ Total soluble protein is the relative portion of desired measured protein compared to total extracted protein (see instant specification at page 25, lines 5-6).

¹² The hGH was fused to a plant signal peptide. Liete, International Molecular Framing Conference, London, Ontario (Aug. 29, 1999); *see also* instant specification at page 16, lines 20-24.

¹³ See the instant specification at page 42, line 24 through 43, line 10 and Figure 7.

¹⁴ Maximum levels of expression are presented in this Table. In figure 14 of the instant specification, a number of independent events were identified with expression of a cytokine at a level greater than 1% of total seed protein (see the instant specification at Example 7 at page 46, line 30 through page 48, line 11 and Figure 14).

As such, it is submitted that the present claims are patentable over Lee, and withdrawal of this rejection is respectfully requested.

II. Rejections Under 35 U.S.C. § 103(a)

Lee in view of Boone et al.

Claim 22 stands rejected under 35 USC § 103 (a) as being allegedly unpatentable over Lee in view of Boone *et al.* (U.S. Patent 5,849,883) (hereafter “Boone”). Final Action at page 4. Applicants respectfully traverse the rejections under 35 U.S.C § 103. However, in order to further prosecution, the claims have been amended without prejudice to recite the production of a cytokine in a corn plant.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The teaching or suggestion to make the claimed combination must be found in the prior art, and not be based on Applicants’ disclosure. See M.P.E.P. §§ 2143.01 and 2143.03.

Initially, as discussed above, it is submitted that whatever else Lee does disclose, the reference does not disclose the presently claimed invention. Moreover, the prior art references, when combined, do not teach or suggest all of the claim limitations.

The Examiner alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to express G-CSF in plants using the method of Lee because Boone purportedly suggests plant cell expression of G-CSF. Final Action at page 5. Boone does not contain any suggestion or motivation to use the method of Lee to achieve high expression levels of G-CSF in corn plants. Furthermore, Boone does not teach or suggest how to accomplish the claimed expression in plants, that expression in corn plants would work at all, or that there would be any reasonable expectation of success in accumulating G-CSF at a level

greater than 1 % of the total soluble protein in corn plants using the method of Lee. Certainly, there is no suggestion in either reference regarding the expression level of G-CSF in corn plants.

Therefore, Applicants argue that there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of skill in the art, to modify or combine the teachings of Lee with Boone to accumulate an expressed cytokine to a level greater than 1% of the total soluble protein in corn plants. Moreover, one of skill in the art would have no reasonable expectation that the G-CSF gene would function sufficiently well in plants to accumulate to a level greater than 1% of the total soluble protein based on the methods and compositions for increasing the expression and recovery of secreted polypeptides disclosed by Lee.

Lee in view of Schouten et al.

Claim 8 stands rejected under 35 USC § 103 (a) as being allegedly unpatentable over Lee in view of Schouten *et al.* (FEBS Lett. (1997) 415:235-241) (hereafter "Schouten"). Final Action at page 6. Applicants respectfully traverse the rejections under 35 U.S.C § 103. However, in order to further prosecution, the claims have been amended without prejudice to recite the production of a cytokine in a corn plant.

Again, Applicants note that, for at least the reasons discussed above, Lee is deficient as a primary reference because it fails to teach or suggest each and every limitation of the presently pending claims. For example, Lee fails to teach or suggest the accumulation of an expressed cytokine to a level greater than 1% of the total soluble protein in a corn plant. Schouten does not supplement the deficiencies of Lee, for example, Schouten also uses transgenic tobacco plants. As such, these references taken alone or together do not teach or suggest the claimed invention. Therefore, Applicants respectfully assert that the Examiner has not provided a *prima facie* case of obviousness under 35 U.S.C. § 103 and respectfully request withdrawal of the rejection.

Thus, for example, the Examiner has not provided an explanation of the suggestion or motivation to combine the teachings of Lee and Schouten for high levels of cytokine expression in corn plants. The Examiner provided no evidence in the prior art that expression of an

antibody to a level of greater than 1% in tobacco plant leaves correlates to high-levels of protein accumulation in corn plants. There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of skill in the art, to modify or combine the teachings of Lee with Schouten in order to accumulate an expressed cytokine with a KDEL sequence to a level greater than 1% of the total soluble protein in a corn plant.

As such, Applicants respectfully submit that the cited references do not render the presently pending claims obvious, since significant limitations of the claims are neither taught nor suggested by the cited references alone or in combination. Therefore, it is submitted that the present claims are patentable over Lee, and withdrawal of this rejection is respectfully requested.

Conclusion

In view of the foregoing amendments, Applicants respectfully submit that the foregoing remarks demonstrate that entry of these amendments places the present application in condition for allowance. Applicants believe that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. As such, Applicants believe that the present application is in condition for allowance and solicit a Notice of Allowance indicating such at the earliest possible time. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,



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